REMARKS

Claims 2 and 4-49 are pending. By this Amendment, claim 49 is added and claim 43 is amended for clarification purposes only, amended in a non-narrowing fashion and amended for reasons not related to the rejection of the Office Action of December 11, 2006. Applicants appreciate the generous amount of time donated by Examiner Bitar and Supervisory Primary Examiner (SPE) Manusco during a March 6, 2007 personal interview, the substance of which is incorporated into the remarks below. Applicants also appreciate the indication of patentable subject matter in claims 8-17 and 27-36. However, Applicants assert that all of the claims are directed to patentable subject matter for the reasons set forth below.

The Office Action rejects claims 5-6 under 35 U.S.C. §112, ¶ 2 stating that there is insufficient antecedent basis for the limitation "said image processing means." This rejection is respectfully traversed as the limitation at issue was amended to the form "said processor" in a Preliminary Amendment filed before the December 11, 2006 Office Action. Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action also rejects claims 2, 4-7, 18-26 and 37-48 under 35 U.S.C. §103 (a) in view of Hanko (United States Patent No. 6,493,041) in view of Tumer (United States Patent Pub. No. 2004/0017224). Applicants respectfully traverse this rejection.

In particular, Applicants assert that it would not have been obvious at the time of the invention to teach or suggest a miniature autonomous apparatus for scene interpretation that includes a digital camera for producing an image of a scene and a processor associated with the camera, said processor adapted to run at least a dynamic

range control process and an image processing detection process, wherein the dynamic

range control process includes a plurality of changeable dynamic range settings for the

camera, and is in communication with the image processing detection process such that

when dynamic range is changed, the image detection process adapts itself to the new

dynamic range setting, as is recited in independent claim 43.

Hanko discloses a method and apparatus for the detection of motion using a video

camera. See, Abstract. As shown in Fig. 1, a video camera 110 is coupled to a

digitizer/decoder 130, which is further coupled to a number of other components 140-

200. However, as is admitted in the Office Action on page 3, Hanko does not teach a

"DRC process in communication with a detection process for adapting the detection the

detection process to changed dynamic range settings of a camera." Accordingly, Hanko

does not teach or suggest each and every feature of independent claim 43.

Tumer discloses an integrated circuit, known as the "RENA-2 chip", which

includes an image sensor and associated support circuitry which has *"much lower noise,*

and thus much improved noise and image resolution." See, Abstract and par [0016]. As

is stated in par [0017], the design of the RENA-2 chip is guided by two principal goals

including: (1) making the chip versatile; and (2) obtaining *"obtaining the best resolution*

possible [by achieving] the lowest possible noise consistent with the characteristics of the

detectors with which the ASIC is intended to use."

Tumer does not teach a DRC process in communication with a detection process

for adapting the detection the detection process to changed dynamic range settings of a

camera, as is recited in independent claim 43.

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To the contrary, nowhere does Tumer teach, suggest or even appreciate a DRC process in communication with a detection process, much less a detection process that adapts itself based on changed dynamic range settings of a camera. A review of Tumer shows that any description of DRC is limited to paragraphs [0015], [0019], [0021] and [0075]-[0077].

Applicants note that paragraph [0015] merely mentions that the RENA-2 chip "*can have different dynamic ranges*;" paragraph [0019] merely mentions that the RENA-2 chip has "*new innovative features, such as user-selectable dynamic ranges*"; and paragraph [0021] merely mentions that the RENA-2 chip has "*user-selectable dynamic ranges.*"

Applicants further note that paragraph [0075] merely mentions that the RENA-2 chip "*is adjustable or selectable*," and that one way to achieve a controllable dynamic range is "*to make the circuit components that control the dynamic range to be switchable, [such as] controlling the dynamic range through an externally supplied voltage or current.*"

Finally, Applicants note that paragraph [0076] merely discusses problems associated with the dynamic range of the RENA-2 chip's predecessor, which had no adjustable dynamic range, and paragraph [0077], which discusses a remedy (multiple DACs) to solve the problem discussed in paragraph [0076].

While the Office Action asserts on page 3 that Tumer "*teaches an image processor including a circuit component that control the dynamic range settings to be adjustable and switchable*", Applicants respectfully point out that the Office Action does not address the claim language of claim 43 (before or after amendment), which not only

requires an adjustable dynamic range, but also (1) a dynamic range process in communication with a detection process, and (2) a detection process that adapts itself based on different settings of the dynamic range process.

Tumer discloses neither of these claimed features, and nowhere does the Office Action make an assertion to the contrary.

The Office Action has not established a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art references must teach or suggest all the claim limitations, there must be some motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine the reference teachings and there must be a reasonable likelihood of success to combine the references. See MPEP §2143, for example.

As discussed above, the Office Action has not provided each and every limitation of independent claim 43. All claim limitations must be taught or suggested. See, In re Royka, 490 F.2d 981, and MPEP §2143.03.

Further, The Office Action has not provided the necessary motivation to modify Hanko using the teachings of Tumer. While the Office Action asserts that "*it would have been obvious ... to use the DRC in Tumer in Hanko et al controller in order to improve the overall look to be more precise and critical*" (citing paragraph [0017]), Applicants assert that this motivation is problematic for a number of reasons.

First, Applicants point out that paragraph [0017] makes no discussion of a DRC. Applicants also assert that a careful review of paragraph [0017] at best advocates that the RENA-2 chip has a layout "*for the shortest possible signal connections*," and to "*achieve lowest possible noise*." Accordingly, at best paragraph [0017] advocates the RENA-2 chip's

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layout and low-noise features, such as the "low-noise CMOS process" disclosed in

paragraph [0066]. Accordingly, Applicants point out that the explicit motivation provided

by the Office Action is insufficient as a matter of law to sustain the specific combination

suggested by the Office Action. See, In re Lee, 277 F. 3d 1388 (2002), In re Kahn, 441 F.3d

977 (2006), and MPEP §2143.01(I).

While Applicants admit that motivations may be found other than in explicit

statements in a reference, Applicants also respectfully point out that the sole motivation

suggested by the Office Action was made on the basis of an explicit statement, which is

provided in quotes on page 3. Other possible sources of motivation are not made (or even

attempted) in the Office Action. For example, the applied art of record "as a whole" does

not support any implicit showing to modify Hanko to include an image detection process

that adapts itself to new dynamic range settings of a DRC process. See, In re Kotzab, 217

F.3d 1365 (2000), and MPEP §2143.01(I), nor has the Office Action suggested that a

motivation may exist in the nature of the problem to be solved. See, Ruiz v. A.B. Chance

Co., 357, F.3d 1270, and MPEP §2145(X)(A).

Still further, while there is no requirement in the Patent Law that the applied art of

record provide the same reason as the Applicants to make the claimed invention, it is clear

that the Office Action must provide some motivation to make the claimed invention, i.e., to

modify Hanko to include not only a DRC process, but to make an image detection process

of Hanko responsive to the DRC process such that when dynamic range is changed, the

image detection process adapts itself to the new dynamic range setting. See, Ex Parte

Levengood, 28 USPQ2d 1300 and MPEP §2144.

Applicants respectfully point out that Hanko does not use, and will not benefit from a DRC. That is, dynamic range is influenced by real time conditions, such as light intensity at the time of operating the camera. Hanko discloses a method for detecting motion within incoming video streams. This video input may come directly from a camera but may also be stored on an electronic storage media. When dealing with video input originating from a storage media it is impossible to consider the dynamic range of the camera since at this stage the camera is no longer operating. Therefore dynamic range control is irrelevant with regard to the configuration of the system as disclosed by Hanko. In contrast, the present invention describes an apparatus consisting of a camera which is associated with a processor such that the processing is done simultaneously with the operation of the camera. Therefore the present invention can adapt the detection algorithm to real time changes in the dynamic range, changes which are automatically monitored by the dynamic range control of the camera.

Finally, even if one of ordinary skill in the art might incorporate the entire RENA-2 chip into Hanko's video camera, as was suggested by Supervisory Primary Examiner Mancuso during the March 6, 2007 interview, such a combination would not result in any DRC circuitry to be in contact with any detection process, or suggest to one of ordinary skill in the art to modify any detection process to respond/adapt itself to a changed setting in Hanko's DRC circuitry.

That is, as neither Hanko or Tumer suggests any detection process that adapts itself based on different DRC settings, the incorporation of Tumer's adjustable DRC into Hanko is insufficient to satisfy the requirements of 35 USC §103(a). Accordingly, even if a subsequent Office Action expanded on any motivation to combine the applied art of record,

there is no possible combination of Hanko and Turner under 35 USC 103(a) that will produce an image detection process responsive to the DRC process such that when dynamic range is changed, the image detection process adapts itself to the new dynamic range setting. See, *Ex Parte Levengood*, 28 USPQ2d 1300 and MPEP §2144.

Thus, independent claim 43 is directed to patentable subject matter, and its dependent claims are also directed to patentable subject matter both for their dependency as well as for the additional features they recite. Accordingly, withdrawal of the rejection under 35 USC §103(a) is respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is welcomed to contact the undersigned attorney at the below-listed number and address.
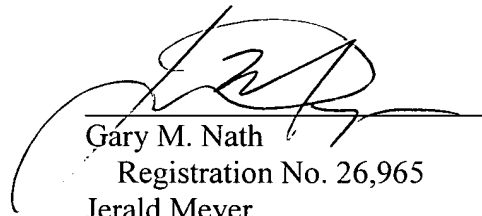
In the event this paper is not timely filed, Applicants petition for an appropriate

extension of time. Please charge any fee deficiency or credit any overpayment to Deposit

Account No. 14-0112.

Respectfully submitted,

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